



(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
20.01.2010 Bulletin 2010/03

(51) Int Cl.:
H04L 27/26 (2006.01)

(43) Date of publication A2:
15.08.2007 Bulletin 2007/33

(21) Application number: **07002953.3**

(22) Date of filing: **12.02.2007**

(84) Designated Contracting States:
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR
Designated Extension States:
AL BA HR MK RS

- **Lee, Ju-Ho**
Yeongtong-gu
Suwon-si
Gyeonggi-do (KR)
- **Jeong, Kyeong-In**
Yeongtong-gu
Suwon-si
Gyeonggi-do (KR)

(30) Priority: **11.02.2006 KR 20060013351**
21.03.2006 KR 20060025870

(71) Applicant: **Samsung Electronics Co., Ltd.**
Suwon-si, Gyeonggi-Do (KR)

(74) Representative: **Grünecker, Kinkeldey,**
Stockmair & Schwanhäusser
Anwaltssozietät
Leopoldstrasse 4
80802 München (DE)

(72) Inventors:
• **Cho, Joon-Young**
Yeongtong-gu
Suwon-si
Gyeonggi-do (KR)

(54) **Method and apparatus for transmitting/receiving broadcast channels in cellular communication systems supporting scalable bandwidth**

(57) Provided is a method and an apparatus for transmitting/receiving a Broadcast Channel (BCH), by which a User Equipment (UE) can successfully receive system information of neighboring cells in a system supporting the scalability of a UE reception bandwidth and a system bandwidth. The method includes identifying a system bandwidth of a cell by comparing the system bandwidth with reception bandwidths of UEs within the cell, mapping

two BCH information blocks including system information to a central band having a bandwidth equal to a transmission bandwidth of the BCH, additionally mapping at least one of the information blocks into each of one-half bands of the system bands, when the system bandwidth is two times an amount of the reception bandwidth, and transmitting a frequency domain signal, to which the information blocks are mapped, to the UEs located within the cell.

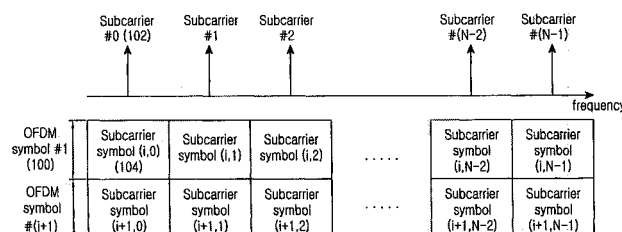


FIG.1



EUROPEAN SEARCH REPORT

Application Number
EP 07 00 2953

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	NTT DOCOMO ET AL: "Physical Channel Concept for Scalable Bandwidth in Evolved UTRA Downlink" 3GPP DRAFT; R1-050706 PHYSICAL CHANNEL CONCEPT FOR SCALABLE BANDWIDTH, 3RD GENERATION PARTNERSHIP PROJECT (3GPP), MOBILE COMPETENCE CENTRE ; 650, ROUTE DES LUCIOLES ; F-06921 SOPHIA-ANTIPOLIS CEDEX ; FRANCE, vol. RAN WG1, no. London, UK; 20050825, 25 August 2005 (2005-08-25), XP050100356 [retrieved on 2005-08-25] * the whole document *	1-16	INV. H04L27/26
X	ERICSSON ET AL: "Text Proposal on Cell Search in Evolved UTRA" 3GPP DRAFT; R1-051308 JTP CELL SEARCH, 3RD GENERATION PARTNERSHIP PROJECT (3GPP), MOBILE COMPETENCE CENTRE ; 650, ROUTE DES LUCIOLES ; F-06921 SOPHIA-ANTIPOLIS CEDEX ; FRANCE, vol. RAN WG1, no. Seoul, Korea; 20051101, 1 November 2005 (2005-11-01), XP050100913 [retrieved on 2005-11-01] * the whole document *	1-16	TECHNICAL FIELDS SEARCHED (IPC) H04L
A	EP 0 938 193 A (SONY INT EUROP GMBH [DE]) 25 August 1999 (1999-08-25) * paragraphs [0052] - [0055] * * figure 1 *	1-16	
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 27 November 2009	Examiner Bodin, Carl-Magnus
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	

EPO FORM 1503 03.82 (P04C01)

